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ABSTRACT

This study examined the relationships between various components of organizational control and individual teacher reports of autonomy. The effects of two types of control were examined: information-gathering structures (such as observation) and directive control structures (such as rules). The data for the study were drawn from a survey of 35 schools in southeastern Michigan, from the Michigan Educational Assessment Program, the Michigan Department of Education's Register of Professional Personnel, Michigan school district offices, and the 1970 United States Census. The survey used two questionnaires, one for building administrators and one for teachers. It was expected that more elaborate control structures would be associated with decreased levels of individual reported autonomy. This expectation was not widely supported by the data analysis. Neither type of control was regularly associated at statistically significant levels with teacher perceptions of their own autonomy. In fact there was some suggestion that control actually enhances perceived autonomy. Explanations for these unexpected findings may lie in the role of organizational structures in facilitating teacher influence attempts and on the role of administrative expectations in facilitating individual professional practice. Future work must specify processes intervening between control structures and individual experiences and explore the nonconstraining effects of control. (Author/JM)

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The Effects of School Control Structures on Teacher Perceptions of Autonomy

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Abstract

While one might expect teachers to perceive themselves as constrained in proportion to the amount of control imposed upon them, this paper presents findings which dispute such expectations. The effects of two types of control structures are examined: information-gathering structures (e.g., observation) and directive control structures (e.g., rules). The analysis relies on questionnaire and case study data. It finds few significant relationships between control and perceived autonomy and some suggestion that control actually enhances perceived autonomy. Future work must specify processes intervening between control structures and individual experiences and explore the nonconstraining effects of control.

Most sociologists have accepted the Weberian conceptualization of organizations as artificial constructs with which to marshall available means in pursuit of a set of goals. The goals are taken as given, and the problem for the organization is establishing structures through which the means or resources can be efficiently used. The organizational resources include the energy, skills and knowledge of organizational members. These must be interrelated with tools and raw materials. In order to achieve the desired structured relationships of these various factors, roles are designated into which individuals can be fitted. Individuals chosen to occupy a role are, thus, subject to organizational control by virtue of the organizational need to structure the interrelationships of roles and other factors. A fundamental corollary of this conceptualization of organizations, therefore, is that organizations place limits on the behavior of individuals who work in them (Hall, 1975). Organizations, including schools, attempt to control member behavior for three specific reasons (Scott, 1966). Since most organizational actors lack adequate skills and knowlege at least at first to apply their energies for satisfactory organizational goal attainment, these actors must be guided in their work. Second, actors must be controlled insofar as they lack internal motivation to perform correctly. And third, the work of various actors must be coordinated, this need increasing with increased functional differentiation and interdependence (Blau, 1970).

Individual autonomy is defined as the domain of decisions in which the individual is free of constraint in the selection of goals and the application of means in pursuit of those goals. Individual autonomy, so defined, is an inverse function of organizational control imposed on individuals. We would expect, therefore, that individuals experience organizational structures as limiting and even repressive.

Autonomy is of particular salience in organizations whose members are professionals for whom it is a key occupational value. Even in such settings, however, the need for coordination leads to the imposition of external control on otherwise autonomous professionals. Some occupations, such as teaching, nursing, social work, and dental hygiene, claim professional status but are not completely accorded this status. For members of these "semiprofessions" autonomy is highly valued but organizational control often severely limits individual autonomy. Of the semiprofessions, teachers are particularly worthy of attention, because several factors likely to influence the imposition of control on teachers and their success in obtaining autonomy are in flux. These include the educational accountability movement, the reluctance of the electorate to vote tax monies, increased rates of educational innovation, and declining school populations.

Porter, Lawler, and Hackman (1975) have conceptualized the processes through which organizations control individuals in terms congruent with the Weberian perspective on organizations. The imposition of control begins with setting standards for individual performance consistent with organizational goals. Next, individual performance is monitored. Third, the individual performance is compared with the standards. And finally, efforts are made to shape individual behavior in order to approximate the standards better.[1]

This four-step process can be viewed in terms of the flow of information between teachers and administrators. This involves administrators finding out how teachers are performing (monitoring) and communicating to teachers how to better match performance to standards (shaping). Two aspects of control in schools will be distinguished. The first involves the gathering of information about teacher behavior and performance. Here, information about teachers flows to administrators. This information becomes the basis for the second aspect of control, directives issued by administrators to teachers about desired behavior and performance. The two types of control are, thus, cyclically related. Both information-gathering and directive control can be personally or impersonally effected. Personal information-gathering control methods in schools center on classroom observation. Impersonal control structures of this type include standardized testing and

educational accountability. Personal directive control includes informal conversation in which administrators make suggestions to teachers but here will focus on formal teacher evaluation. Impersonal directive control includes rules and procedures and systems of rewards and punishments.

The distinction between personal and impersonal control is important for at least two reasons. First, personal control involves face-to-face interactions between individuals whose hierarchical statuses differ. Since teachers often feel that hierarchical status differentials between themselves and administrators are unjustified, such interactions may be accompanied by considerable tension (Crozier, 1964).[2] Second, personal control allows administrators considerable discretion in the determination of the intensity with which control is applied, to whom to apply it at what levels of intensity, and the standards against which adequate performance is to be measured. While impersonal control may be subject to occasional administrative discretion, as well, formalization and standardization of impersonal control methods reduces such discretion and also gives teachers a basis for contesting the discretionary application of impersonal control which they feel is arbitrary or discriminatory. The elaboration of contractual work rules, for example, represents teacher efforts to limit administrator discretion by substituting impersonal for personal control.

The Data

All the data for this paper describe junior high and middle schools. The data are drawn from a number of sources. The most important of these is a survey of 35 schools in Southeastern Michigan, selected as a stratified random sample. In order to limit the number of strata in the sampling design, about one-third of the available junior high and middle schools in the sampling area were excluded from the population. A comparison of structural characteristics at the included and excluded schools indicates that the findings to be reported can probably be extrapolated to all schools of this level in the sampling area (see Leiter, 1977). The survey used two questionnaires, one for building administrators (response rate virtually 100%) and another for a random sample of teachers at each school (response rate 69%, yielding an average of seven teachers per school). Additional

school-level information is available from the Michigan Educational Assessment Program and the Michigan Department of Education's Register of Professional Personnel. These provide data about the socio-economic setting of the school and the composition and characteristics of the staff and student body. School district-level data were obtained from district offices and from the 1970 United States census.

The interpretation of these data will be greatly aided by grounding in three intensive case studies, given pseudonyms for anonymity and easy reference. Village School, located at the center of a rural area, serves seventh and eighth graders most of whom are bussed to the school. The principal is a man in his thirties who appears to be personally sponsored by the superintendent. The superintendent selected him from the ranks of the district high school teachers and athletic coaches, first to serve on a state-wide panel for curriculum development in health education and later for administrative positions. The principal maintains very close contact with the superintendent, checking with him and deferring to him on many matters, including the handling of disagreements between himself and the faculty. The faculty is distinguished by unusual solidarity, both among teachers themselves and in opposition to the principal. The teachers interact spiritedly in the teachers' lounge, have parties on the outside, and even circulate a gossipy newsletter. Part of their conversation is focused on their antagonistic relationship with the principal, against whom they complain and plan the filing of grievances.

Ring School, located on the edge of Detroit's suburban ring, serves seventh through ninth graders, most of whom are bussed to the school. The principal commands the esteem of teachers, students, and the community. He was a football and wrestling coach in the district high school, became known for his leadership qualities and his ability to motivate and discipline students, and was selected without any previous administrative experience as the first principal of Ring School. In contrast to the principal at Village School, the principal at Ring School does not regularly consult with the district superintendent, but runs his school very much on his own. The teachers express satisfaction with their work, especially with the leadership offered by the principal. They are not nearly as cohesive as the teachers at Village School. Their ties are more to the school and the principal than to one another.

City School is one of fifty-five middle schools organized in eight regions of the Detroit Public Schools. It is located near downtown Detroit in a mixed Latino and Appalachian white area. Desegregation has changed the composition of the student body to approximately equal numbers of whites, blacks, and Latino students. The principal, a black, was chosen by the Latino community when they saw that the number of black students would soon be increasing. He works effectively with students and parents, but spends little time on the internal management of the school. This is left to two lower level administrators called unit heads. Units are "schools within the school." They replaced academic departments when the court-ordered desegregation plan was implemented a few months before the intensive study was conducted. The faculty is about one-third black, matching the proportion black in the student body, but only two of the teachers are of Hispanic origin. Teachers express grave concern about the inability of the school to better control its students. They are especially troubled by problems caused by student absenteeism and tardiness.

Operationalizing Perceived Autonomy from the Survey Data

Operationalizations for explanatory and control variables are given as the concepts behind them are introduced. The concept of perceived autonomy, the dependent variable, has already been introduced. Moreover, its operationalization is complex. For these reasons, the basic outline of nine operationalizations of perceived autonomy is given at this point. (A fuller description of these measures and the conceptual and empirical considerations which underly them is available in Leiter, 1977.)

Perceived autonomy is assessed in three decision domains: classroom and pedagogy, coordination, and personal behavior. For each domain, autonomy refers to individual control over decisions. Such control may arise from control over the final decision or from substantial influence, relative to the influence of others, over the decision making process. Operationalizations of autonomy reflecting each type of control are included.

Control over final decisions is portrayed by domain summary scales and by individual decision items. All of these are based on teacher responses with respect to 28 "matters of concern to teachers" to the question:

Thinking about yourself, is the final decision in this matter made:

(1) completely by you
(2) by you and others, jointly
(3) not at all by you.

The 28 items were grouped for a priori reasons into the three decision domains. For the classroom and coordination domains, the inter-item correlations allowed (i.e., did not contradict the a priori groupings) the formation of summary scales. Item weights in the first principal component were used to form each summary scale. The constituent decisions and weights for these two summary scales are:

Classroom Autonomy Summary Scale

what texts to use (.23)
what student behavior is permissible in classroom (.34)
what topics to cover (.39)
when to test students on homework (.25)
amount and kind of homework (.44)
whether to discuss controversial topics in class (.38)
when to file lesson plans (.16)
which discipline methods to use (.26)
whether to use individual or group work in class (.44)

Coordination Autonomy Summary Scale

when to have conferences with parents (.17)
whether teacher attends school-wide meetings (.26)
whether to discuss controversial topics in class (.35)
when to file lesson plans (.40)
for what use a personal or business day is permitted (.45)
which outside speakers and materials to use (.17)
whether teacher leaves school in non-class hours (.40)
which discipline method(s) to use (.24)
how much to spend on materials (.26)

For the personal behavior decision domain, the inter-item correlations were weak and unpatterned. This domain is, therefore, not represented by a summary scale but rather by two decision items, "what lifestyle is appropriate outside of schools," and "whether teacher leaves school in non-class hours." Two other decision items, well weighted in neither summary scale, are also included among the dependent variables in the data analysis: "when to have conferences with parents" and "which outside speakers and materials to sue."

Relative influence over the decision making process, the other source of autonomy, is measured for all three decision domains (but not for constituent decisions). The questionnaire items use the "control graph" approach of Tannenbaum and his colleagues (1968). Teachers reported their perceptions of the actual influence the individual teacher and several other actors exercise over the three domains. The individual teacher's influence in each domain was compared with the average of the influences of the other actors to give three relative influence items.

Overall, then, perceived autonomy is operationalized with nine measures distributed over three decision domains:

I. Classroom Autonomy

- A. Summary scale
- B. Influence measure

II. Coordination Autonomy

- A. Summary scale
- B. Influence measure
- C. Outside speakers item
- D. Parent conferences item

III. Personal Behavior Autonomy

- A. Influence measure
- B. Lifestyle item
- C. Non-class hours item

The rest of the paper is divided in two. The first part examines personal and impersonal control structures through which information is gathered and directives issued. For each structure, the expected effects on teacher autonomy are discussed. The basic expectation, consistent with the Weberian perspective, is always that the elaboration of control limits individual autonomy. Where appropriate, some qualifications are given. After discussing the expected effects, the control structure is operationalized using the survey data.

The second part of the chapter evaluates the expected effects using the survey data. Additionally, the qualifications outlined in the first part of the chapter are examined along with the effects of any other factors suggested by the data.

Expected Effects and Operationalizations

Unless otherwise noted, the operationalizations of control structures are based on data from questionnaires completed by one of the school administrators and then applied at the school level. All teachers from the same school receive the same value for such school level variables. This is logical not only because of the ways in which these data were collected but also conceptually because of the contextual nature of these structural characteristics. Usually, teachers at the same school are subject to a common school structure. They are, thus exposed to about the same level of the school-level factor, although they may not all be affected in the same way by it.[3]

Classroom Observation: Personal Information Gathering Control

Supervision is the element of the organizational control system which operates through face-to-face contact between superordinates and subordinates. Supervision involves both the gathering of information about subordinate work performance and the issuing of directives by superordinates. In schools these two elements of supervision are distinguished as observation and evaluation, respectively. Observation can be expected to limit teacher autonomy by helping administrators monitor behaviors which can, then, be compared to standards administrators hold for good teaching.

While teacher observation is a part of the control system at

most schools and is often prescribed formally, several factors decrease its importance compared to other control modes. First administrators, such as those in the intensive case study schools, believe that they can learn how well teachers are controlling their students without classroom observation. Since teachers often send misbehaving students to the main office for disciplinary action, many administrators believe the number of students who are sent to the office indicates a teacher's level of difficulty in maintaining order. Administrators depend on this indirect indicator because they believe, perhaps justifiably (Schlechty, 1976), that students are on their best behavior when the principal is in the classroom, that, in effect, students enter into a temporary alliance with the teacher against the principal. Therefore the more central classroom control is to the administrator's standard of good teacher performance, the less likely he is to rely on observation.[4]

Second, administrators' confidence that their own knowledge of subject matter areas is adequate to judge the competence of the teachers under observation may vary. This problem has sometimes been solved in the past by leaving the judgment of a teacher's subject matter competence to the appropriate department chairperson. Budgetary cutbacks and the increasing stress in the junior high school years on the social adjustment rather than the academic advancement of children have led to the demise of departmental organization in many schools. For example, the reorganization of Detroit junior high schools as middle schools was accompanied by the elimination of academic departments. This puts more of the burden of judging the subject matter skills of teachers on principals and assistant principals, whose experience may be so narrow or so restricted to nonacademic subjects that they are ill-equipped to assess the pedagogical competence of much of their faculties.[5] Insofar as administrators themselves lack the skills to judge their teachers, they may deemphasize classroom observation as a means of control.

A third reason why personal classroom observation can be expected to play a relatively minor role in the control system is that the physical isolation of the classroom forces the principal to open the classroom door quite obviously, enter a place where he is not a regular actor, and probably interrupt the usual pattern of interaction. In

particular, as noted earlier, students, quite conscious of the principal's presence, may act differently than they usually do.

Teacher contracts, by often prescribing the rights and duties of both teachers and administrators with regard to observation, may also make the observed performance unrepresentative. For example, in some contracts the administrator is required to notify the teacher in advance of his intention to observe. This allows the teacher and perhaps the students to plan something special and unusual. In some contracts, teachers are given the option to comment on the evaluation of the observation session.[6] This specific provision and the overall presence of rules about observation in contracts indicate that observation often is seen as an adversary situation, setting administrator against teacher rather than a cooperative situation in which the administrator gathers information to help the teacher. In an adversary situation the teacher may try to alter the normal classroom situation to protect himself.

Finally and related to the above, teacher resistance may make observation less useful for the gathering of accurate information. Teachers may resist observation for four reasons. First, believing themselves to be professionals, they may find in observation a manifestation of hierarchical authority and therefore an intrusion on the domain in which they feel they ought to exercise control. Second, believing themselves to be subject matter experts, teachers may distrust the administrator's competence in the relevant subject area and therefore doubt the principal's ability to judge their performance accurately. This is quite the same apprehension administrators hold. Third, teachers may fear that the principal will not distinguish between student performance and teacher performance. Some students misbehave or learn poorly despite good teaching. This is quite the opposite fear from that of administrators that exceptional student efforts at the time of observation will mask usual teacher performance. Finally, administrators often do not make clear their standards for good performance. Teachers may consequently feel administrators evaluate what they observe according to different standards for different teachers, using discretion in this way to build cases against teachers of whom they are predisposed to think ill. This was

precisely the fear of teachers at Village School where the principal gathered information extensively but did not give much indication about his standards and expectations. The general mistrust of the principal at Village School suggests, however, that where teachers feel more positively about the principal, their resistance to observation may be less. Teacher resistance to observation should decrease teacher cooperation with administrator efforts to monitor teacher performance and limit the information available by this method.

All four of these factors, then, contribute to the expectation that administrators will rely less on classroom observation for the gathering of information about teacher performance than its potential for monitoring would lead one to predict. However, where administrators feel the maintenance of classroom order is not central to teacher performance, where administrators have previous skills in academic areas, and where the teachers generally are satisfied with the motives and action of the principal, the usefulness of classroom observation for the gathering of information about teacher performance may be enhanced.

Variation in use of and reliance upon classroom observation will be operationalized by three variables. First, administrators ranked the importance of classroom observation for teacher promotion in comparison to other criteria of performance, such as student performance, parental approval, and compliance with rules and procedures. The higher ranking the more important observation is for teacher promotion. Second, the administrator's reports of the adequacy of observation for judging teacher performance were combined in a scale.[7] A high score on the scale indicates that the administrators feel the information they get is adequate for evaluating teacher performance. Third, the principal reported how much he favors "observing teachers and consulting with them afterwards" as a method for "improving the educational program at [his]...school." The higher the response, the more he favors this method. While there is no measure here for the actual pattern of use of observation, the three measures to be used would seem to compensate by including both the administrator's motivations for and confidence in his program of observation.

The absence of a behavioral indicator for the availability or frequency of classroom observation is troublesome in one way, however. The adequacy scale can be assumed to result from an interaction of the availability of observation and the need for observation. Where the need for observation is low, a low level of availability may produce the same adequacy rating as where both components are high. The effects of these two situations, both with the same adequacy ratings, on teacher autonomy can be expected to differ substantially. Since the two situations cannot be distinguished with these data, the adequacy scale's relationship to the measures of autonomy and to other variables is less predictable than one would wish.[8]

Standardized Testing: Impersonal Information Gathering Control

Standardized testing can serve to gather information about student performance but also may be used to monitor teacher performance without the personal contact between teachers may resist, thus enhancing the capacity of the school to control teachers. Test data are used differently from school to school. At Ring School, test data were simply used on occasion to defend administrative decisions about student placement. At Village School, however, the data were used to evaluate the success of the curriculum and possible needs for the reinforcement of effort in particular classrooms or by particular teachers. These more detailed uses of testing data required careful analysis of the data, provided at this school by the counselors.[9]

The role of standardized testing in the control system will be operationalized by measuring the frequency with which tests are given. The frequency measure is the number of times a typical student takes a standardized achievement or other standardized test during his or her career at the school. Frequency is not a close indicator of the importance of testing or of the emphasis assigned to test results. Unfortunately, no other measures are available.

Educational Accountability: Impersonal Information Gathering Control

Implementation of the concept of educational accountability in Michigan has been based on redefining educational outcomes so that

they can be measured directly. An important tool in this process is the revision of curricula in terms of Performance-based Objectives (PBO's). When curricula are revised in this way, a statement that a student learns fact or concept "A," can be accompanied by a statement that the student who has learned "A" is able to do "B." "B" is a PBO.

The Michigan Department of Education has mandated the gradual revision of curricula in all school districts in terms of PBOs. It has provided workshops where local educators can learn the use of PBOs and at the same time write a state-wide set of PBOs for various subject areas. Additionally, all fourth and seventh graders in the state take criterion-referenced achievement tests, the Michigan Educational Assessment Program tests, which are designed to measure achievement with respect to these state-wide PBOs. Schools vary substantially in the extent to which they have followed the lead of the state Department of Education in revising curricula, collecting information about classroom outcomes, and assessing responsibility for those outcomes. While some schools have merely begun rewriting curricula in terms of PBOs, others base semester examinations on PBOs and even evaluate teachers according to student progress on PBOs.

The potential of the educational accountability program to constrain teachers lies in the specification of standards in measurable terms. With PBOs, educational outcomes can be determined much more fully than they have been previously in many districts. Moreover, uniformity can be imposed on educational outcomes much as uniform production is assured in factories. In public, teacher objection, voiced through teacher organizations, center on taking choices about what to teach away from teachers. In private conversation, however, teachers also express concern that they will soon be evaluated in terms of their students' achievement. They object that many other factors besides teaching determine student achievement. The clear specification of standards against which performance can be measured may, however, protect teachers from arbitrary or "subjective" administrative evaluations. This reduces administrator discretion in the managing of the school.

Accountability is operationalized here by a Guttman scale which measures variation in the use of PBO[illegible] by schools. This scale has a coefficient of reproducibility of .93.[10]

Evaluation: Personal Directive Control

At most schools, evaluation is a formal procedure used as the basis for decisions to renew contracts, grant tenure, and promote teachers to new positions. Written records are usually created and placed in the teacher's personnel file. Teacher behavior is, thus, shaped by the reinforcement of a positive evaluation and the suggestion to change of a negative evaluation. The evaluation procedure, often prescribed in the teachers' contract, typically provides for the evaluating administrator and the evaluated teacher to meet to discuss the evaluation. This discussion of the evaluation allows the administrator to give the teacher instructions about desired behavior. For example, at Ring School, an administrator was explicit about the use he makes of evaluation as a time to reinforce for nontenured teachers the general expectations the school holds for teachers behavior. In part the evaluation and the subsequent discussion are focused around one or more observations of the teacher's classroom performance. The importance of evaluation as a method of control is subject, therefore, to the same limiting factors as observation.

The use of evaluation is operationalized by two measures of frequency, the frequencies of evaluation of tenured and nontenured teachers. One end of each of these scales was collapsed in coding, making these ordinal level variables. It is reasonable to assume that control increases with the frequency of evaluation. Since evaluation is a key procedure in deciding whether to grant tenure, administrators at almost all schools take time for the evaluation of nontenured teachers. The evaluation of tenured teachers is much less pressing and, therefore, may vary in frequency more than the evaluation of nontenured teachers. The frequency of evaluation of tenured teachers may be determined by other demands on administrators, such as the level of environmental pressure. Greater variation of such evaluation may

allow it a statistically greater role in predicting the impact of the control system on teacher reports of autonomy.

Rules and Procedures: Impersonal Directive Control

Generally, rules and procedures, by prescribing work rules, should limit teacher autonomy. This will be true especially when the rules are actually enforced. Enforcement depends on the availability of administrative staff for monitoring work performance. Directive control by rules, thus, is closely tied to information gathering control. Rules require the least personal intervention in enforcement when they are written down (formalized), and applied uniformly throughout the organization (standardized).

While the overall effects of this type of control should constrain teachers, several aspects of the use of rules and procedures may enhance teacher autonomy or at least the perceptions thereof. As discussed earlier, rules may decrease teacher resistance to hierarchical infringements of rights they claim as professionals by replacing face-to-face contact between status unequals. Rules, such as those negotiated by teachers' organizations to regulate working conditions, may institutionalize aspects of teacher autonomy (Moeller, 1964). Rules may decrease uncertainty and with it the dependence of teachers on those who would exercise discretion in the absence or rules, thus increasing teacher autonomy (Crozier, 1964). Formalization and standardization should increase this effect.

Both principals and assistant principals were asked to report in which of twenty-eight areas the school has and enforces rules. The same twenty-eight areas were used to assess teacher perceptions of their autonomy. To correspond to the autonomy summary scales for the classroom and coordination decision domains, parallel rules scales were created using areas and weights derived for the summary scales. High scores on these scales indicate agreement among administrators on the existence and enforcement of rules, especially those emphasized in the autonomy summary scales. In addition, teachers were asked a series of questions which scaled to give an indication of the extent of formalization and standardization at the school.[11] A high score on

the scale indicates a school where rules and procedures are highly formalized and standardized. A final operationalization is provided by the principal's response of how much he favors "providing effective rules, procedures, and guidelines" as a method "for improving the educational program at [his]...school." The higher the response the more he favors this method.

Rewards and Punishments: Impersonal Directive Control

For Max Weber and students of bureaucratic organization who have followed him, a key element of organizational structure has been the degree to which technical competence (i.e., performance consistent with a given set of goals) is the criterion which the organization rewards (Hall, 1962). For Weber, technical competence is derived from both training and experience, but not from such particularistic ties as kinship or friendship. Teacher salaries are largely a function of levels of training and experience.

The use of technical competence as a criterion for rewards has different implications at the times of hiring and of promotion or contract renewal. At hiring, it refers largely to achievement in college or graduate school. At promotion, competence also refers to job performance. This difference results in different possible effects on teacher autonomy. If the amount and quality of training a candidate has received is used as a criterion for hiring, the image of the faculty members as professional educators may be enhanced. Becker (1962) has argued that professionalization comes from the manipulation of the image or symbol of professionalism by members of professionalizing occupations to lay claim to the attendant rights and prerogatives. When hiring practices are focused on the candidate's training, teachers at a school may be better able to claim professional status and greater autonomy.

The degree to which merit is used as a criterion in teacher hiring will be operationalized here by administrator ratings of the extent to which candidates for teaching jobs at the school are helped or hurt by high grades, graduate education, high test scores, specialization, and teaching experience. These will be combined into a scale coded

such that a high score indicates that excellent training helps the chances of an applicant.[12]

To some extent rewarding competence with promotion by showing that the school values high quality teaching, should also help teachers claim their rights as professionals to autonomy. This, however, ignores important ways in which rewards shape behavior. Blau's initial findings (1955) and Ridgeway's subsequent review of related studies (1956) suggest that employees attempt to adjust their behavior to fit the criterion the organization rewards. In most schools, "good" teacher behavior has several facets, some pedagogical, some custodial, some administrative, and some social. Administrators can only use rewards to emphasize certain facets of good teacher behavior and thus constrain teachers when they exercise discretion over the distribution of rewards and punishments. Two possible areas of such discretion are salary increases and the denial of tenure or contract renewal.

Powerful factors reduce administrative discretion. As school systems have ceased to expand, faculties have aged[13] and teachers have become less likely to switch school systems. Both factors decrease the pool of new and/or young teachers about whom tenure decisions must be made. Moreover, most probationary teachers are given tenure. At Ring School where substantial emphasis was put on maintaining classroom order, even a probationary teacher who had great difficulty in this regard was "worked with" until he could control his class. Moreover, he had been given tenure before much improvement had been noted. One administrator explained that it was easier to work with teachers who basically fit the mold the school desired than to fight with the teachers' organization over the tenure issue. Because of the decreasing pool of probationary teachers and the tendency to give almost all probationary teachers tenure, the number of teachers denied tenure is quite small.[14] Thus, while a mean of 12.1 teachers per school have been granted tenure in the past five years, only an average of 1.2 have been denied tenure during that period. Even this small figure, which reached a maximum of four in one school, should not cause a total discounting of the power of administration discretion in granting tenure to indicate to teachers what is desirable performance. In fact, when tenure denial is reserved for serious cases, its impact on the rest of

the faculty may be accentuated. In the intensive case study schools, teachers remembered these situations well and, importantly, were quite clear about the reasons for the termination, their understanding usually corresponding to the administration's reasons. Furthermore, the same purpose for control of teacher behavior is served by dismissals of teachers at other times, either before or after the tenure decision, although the latter is quite rare. An average of 1.1 teachers per school were asked to resign or dismissed during the five year period, aside from tenure denials.

Administrator discretion in granting salary increases, as in denying tenure, faces limiting factors. Collective bargaining has resulted in uniform salary schedules, almost always built around years of experience and level of training.[15] Any departure from the salary schedule is justified by the performance of extra duties. Theoretically, teachers could be rewarded for technical competence by salary increases, but teachers' organizations are strongly opposed. Only one school in the sample awarded such a "merit increase" in the year preceding the collection of the data and then to only one teacher. Some discretionary increases are given by assigning deserving teachers extra duties in return for which they receive increased salaries. For instance, at Ring School teachers who contributed their time to school functions received these extra duties. This is a telling example of the use of administrative discretion to define and reward "good teaching" and, thereby, control teacher behavior. On the average, less than one teacher per school received a discretionary salary increase during the year preceding the data collection, almost, always in return for extra work.[16]

Administrative discretion in the distribution of rewards and punishments to teachers already hired will be operationalized to measure the impact of tenure and contract renewal decisions and discretionary salary increases on teacher autonomy. The measures used will be the proportion of the faculty granted tenure during the past five years, indicating the administration's opportunity to reward the desired performance, the proportion of the faculty denied tenure, dismissed, or asked to resign during the last five years, indicating the extent to

which the administration exercised discretion in terminating contracts, and the proportion of the faculty receiving discretionary salary increases in the last year, indicating the use of discretion in distributing monetary rewards to teachers. In all three variables, the proportion will use the size of the current faculty as the denominator.

Table 1 lists the control structures discussed in the preceding sections and the variables through which these structures are operationalized. Descriptive statistics at the school level are given for

(Insert Table 1 here.)

these variables. (The rules formalization and standardization scale is an exception, because it was originally formed from individual-level data.) Means of zero reflect the algorithm for principal component analysis through which these variables were formed.

There are few surprises in these school-level summary statistics. Administrators consider classroom observation moderately important for teacher promotion decisions and as a method for improving educational practice at the school. Standardized tests are administered to students fairly frequently, although there is substantial variation here. At all the schools, however, the Michigan Educational Assessment Program (MEAP) test is given to seventh graders. Most schools use PBOs in some courses but have not implemented other aspects of accountability possible with PBOs. Nontenured teachers are evaluated much more frequently than tenured teachers, but the variation in the frequency of evaluation of tenured teachers is rather large given the small size of the mean for this variable. Rules are favored slightly more than observation as a method to improve educational practice. On the average, over one-third of the faculty has been granted tenure in the last five years. During that same period, however, only an average of seven percent of the faculty was denied tenure, dismissed, or asked to resign, although given this small figure the variation from school to school is substantial. Very few teachers receive discretionary salary increases, either with or without extra duties.

Table 1: Descriptive statistics at the school level for control structure variables.

	Meaning of large values	Mean	Standard Deviation	Number
Classroom Observation				
Importance for promotion	important	4.51	1.01	27
Adequacy	adequate	0.00	1.25	34
Method for improvement	favored	3.62	.60	34
Standardized Testing				
Frequency	frequent	4.48	2.78	31
Educational Accountability				
Performance-based objectives	implemented	2.34	1.41	32
Evaluation				
Frequency/nontenured teachers	frequent	2.84	1.46	31
Frequency/tenured teachers	frequent	.50	.36	29
Rules and Procedures				
Number/classroom	many	1.16	.49	34
Number/coordination	many	1.53	.59	34
Formalization-standardization	high	0.00	1.32	243*
Method for improvement	favored	3.71	.58	34
Rewards and Punishments				
Proportion granted tenure	high	.38	.29	27
Proportion denied tenure, dismissed, asked to resign	high	.07	.07	32
Proportion given discretionary salary increases	high	.03	.09	33
Importance of merit at hiring	important	0.00	1.44	29

* This variable was collected at the teacher level. The descriptive statistics for it are, therefore, not comparable to the statistics for the other variables in this table.

Effects of Information Gathering Control Structures

With these measures the fundamental proposition of this paper that the control system limits teacher autonomy can now be evaluated. The effects of information gathering control and the effects of directive control will be examined in turn.

(Insert Table 2 here.)

Table 2 reports correlations between the nine measures of perceived autonomy and the indicators of the three types of information gathering control structures.[17] In general, significant correlations are scattered and weak. Perceived autonomy with respect to classroom decisions is not associated with any of the three information gathering structures. Although the relationship is weak, teachers see themselves as less autonomous in their non-class hours at schools where accountability is more fully implemented, but more autonomous at schools where the administrator felt the opportunities for classroom observation were adequate. Otherwise, personal behavior decisions are not affected by observation, standardized testing, and the accountability movement. Coordination decisions are subject to somewhat stronger effects of these structures. Teachers feel slightly more autonomous with respect to these decisions at schools where the principal does not favor the use of observation and subsequent consultation as a means for improving the school but does assess the opportunities for observation as adequate. They feel somewhat more autonomous at schools where students take a fairly high number of standardized tests.

In this overall pattern of insubstantial effects of information gathering structures on autonomy, perhaps the most puzzling aspect is the absence of any impact of classroom observation on classroom autonomy. In observation, the administrator has a chance to gather information about teacher performance personally. If information gathering has an impact on perceptions of autonomy, personal observation might be expected to capture the effect best. The previous discussion suggested, however, that several factors, such as the physical isolation of the classrooms, administrator belief that classroom observation is not revealing, inadequate administrator expertise in academic areas,

Table 2: Correlations between nine measures of autonomy*** and information gathering control variables.

	Classroom Observation			Testing	Educational Accountability
	Importance/ promotion	Adequacy	Method/ improve.	Frequency	FBOs
Classroom Autonomy					
Summary scale	.01	-.01	.02	.10	.07
Influence measure	-.01	.10	.02	.10	.08
Coordination Autonomy					
Summary scale	.15	-.23*	.18**	-.21**	.13
Influence measure	.06	-.01	-.05	.06	.12
Outside speakers item	-.01	-.05	-.12	-.06	.04
Parent conferences item	-.10	-.14*	-.04	-.09	-.01
Personal Behavior Autonomy					
Influence measure	-.03	-.04	.04	.01	.07
Lifestyle item	-.13	-.07	-.10	-.02	.05
Non-class hours item	.05	-.20**	.08	-.08	.13*
Descriptive Statistics (teacher level)					
mean	4.57	.02	3.65	4.29	2.32
standard deviation	.92	1.27	.57	2.52	1.33
number	198	246	246	224	237

* significant at the .05 level
** significant at the .01 level
***All autonomy measures are coded with autonomy at low end of scale.

and teacher resistance, may weaken the impact of observation on teacher autonomy. The survey data allow the exploration of some of these explanations. One explanation suggested that administrators who consider classroom discipline and order to be very important would rely less on observation. The importance of classroom order for the administrator is operationalized by combining his absolute rating of the importance of classroom order and its importance in comparison with other attributes of teaching.[18] On the resulting three point scale, the higher the code the more important classroom order is to the administrator. The expectation is that the more important classroom order is to him, the less important observation will be rated for teacher promotion and as a method for improving educational practice at the school. Furthermore, assuming administrators who feel classroom order is very important have lower needs to observe teachers in the classroom, such feelings should also be associated with high ratings of the adequacy of the observation system. Table 3 shows that one of

(Insert Table 3 here.)

these three expectations is born out. At schools where an administrator feels classroom order is important, classroom observation is rated as fairly unimportant for teacher promotion decisions. The other two predictions are not born out.

A second explanation for a diminished effect of classroom observation on classroom autonomy perceptions is that where administrative expertise in academic areas is low, ratings of the importance and adequacy of such observation are low, because administrators are poorly equipped to make sense of the classroom activities they observe. Administrative academic expertise is operationalized by a measure of the total academic teaching experience of all the school's administrators.[19] Table 3 shows that this measure of administrative academic expertise is rather strongly related to the principal's rating of the importance of observation for improving educational practice at the school: the greater the expertise, the more the principal favors observation. The other two predictions are not born out; indeed, the relationship between administrative academic expertise and the administrator's rating of the adequacy of the observation is substantially,

Table 3: Correlations between administrator ratings of the importance and adequacy of classroom observation and administrator beliefs in the importance of classroom order, administrative academic expertise, and teacher resistance to classroom observation.

	Administrator ratings about classroom observation:		
	Adequacy	Importance/ Promotion	Method/Improvement
Administrator belief in importance of classroom order	.01	-.24**	.03
Administrative academic expertise	-.10	-.03	.40**
Teacher resistance to observation.			
Satisfaction with principal's:			
overall performance	.14*	.17*	.08
teacher evaluation	.09	.14	.13
handling of instructional and pedagogical matters	.08	.17*	.11

* significant at .05 level
** significant at .01 level

though not significantly, in the opposite direction from the prediction.

The third explanation which can be evaluated with these data concerns teacher resistance to observation. Where such resistance is high, observation should be relatively ineffective and unimportant. Teacher resistance is operationalized with three measures of teacher satisfaction with the principal: overall satisfaction with the way the principal does his job; satisfaction with the manner in which the principal evaluates teachers; and satisfaction with the way the principal deals with matters relating to instruction and pedagogy.[20] For all three satisfaction measures, satisfied responses are coded at the high end of a four point scale. Table 3 shows that the effects of teacher resistance, measured by dissatisfaction with the principal, are weakly but consistently related to administrator ratings of the importance and adequacy of classroom observation. Three of the correlations are statistically significant. The consistency of the direction of these correlations, moreover, should be emphasized. In every case, the correlations are in the predicted direction.

Overall the results in Table 3 are suggestive rather than overwhelmingly persuasive. In each of the first two explanations, one fairly strong relationship is accompanied by two weaker ones. In the third explanation, the relationships are weak, but there is a consistent pattern to their directions. This gives some support to the arguments that administrator beliefs in the importance of classroom order, administrative academic expertise, and teacher resistance to observation influence the importance and adequacy administrators ascribe to the classroom observation systems at their schools. Insofar as these ratings of importance and adequacy are indicators of the extent of use of observation at the school, a measurement issue, and insofar as observation has an impact on teacher perceptions of autonomy, an issue of substance, the use of classroom observation should have a greater constraining effect on teacher decision making where the principal feels classroom order is not maximally important, where administrative academic expertise is high, and where teacher resistance to observation is low (contextual factors).

(Insert Table 4 here.)

Table 4: Comparisons of correlations between classroom autonomy and classroom observation at two levels of three obstacles to observation.

Note: Comparisons which differ by .15 or more are boxed.

E = .15 or greater difference in expected direction
N = .15 or greater difference not in expected direction

		Summary Scale			Relative Influence		
	Range of Ns	Adequacy	Import/ Promotion	Method/ Improve.	Adequacy	Import/ Promotion	Method/ Improve.
Importance of classroom order							
low	139-188	-.03	.04	.04	.15	.03	.05
				E	E	E	E
high (obstacle)	22-32	-.03	-.08	-.23	-.32	-.33	-.52**
Administrative academic expertise							
low (obstacle)	104-135	-.16	-.13	.05	.05	-.12	.00
		E	E			E	
high	72-95	.16	.06	.09	.16	.12	.02
Teacher satisfaction with principal (resistance)							
Overall	125-156	.08	.01	.00	.02	.03	-.03
		N			N		
low (obstacle)							
high	57-77	-.16	-.08	-.05	-.35*	-.07	-.02
Evaluation	118-157	.09	.05	-.01	-.05	.00	.00
		N		N	N	N	N
low (obstacle)							
high	33-45	-.09	-.03	-.14	-.35*	-.25	-.25
Instruction	141-173	.03	.02	-.03	-.09	-.01	-.01
			N		N	N	
low (obstacle)							
high	32-44	-.03	-.22	.08	-.33*	-.21	-.12

* significant at .05 level
** significant at .01 level

Table 4 reports the correlations between the three indicators of the use of classroom observation and two measures of classroom autonomy for two levels of each of these three contextual factors.[20] While some of the correlations are rather large, only a few of them reach statistical significance, due to the reduced number of cases in some of the cells. The issue here, however, is the degree to which comparisons of correlations for high and low levels of the contextual factors are in the predicted direction: in general, where the obstacle to observation is low (i.e., classroom order is not very important to the administrator; administrative academic expertise is high; teacher resistance is low), a high level of observation should be more strongly associated with a low level of reported teacher autonomy than where obstacles to observation are high. In other words, observation should have a greater constraining effect on teachers where obstacles to observation are low than where they are high. Restricting attention to those pairs of correlations which differ substantially, defined as an absolute difference of .15, comparisons can be made in seventeen of the thirty possible cells. In seven of the seventeen comparisons, the difference is in the expected direction. All ten cases where the comparison is in the opposite direction from that expected, however, involve the impact of teacher satisfaction on the correlations of classroom autonomy. In fact, in no case is a substantial difference of correlations for high and low levels of satisfaction in the expected direction. How can one explain the unexpected but consistent findings that the constraint teachers feel in their classrooms due to observation is less where obstacles to revealing observation are low than where they are high? One explanation is that teachers at some schools do not experience observation as constraining. Conditions which produce such teacher experiences are explored much more carefully in a full discussion of Ring School in Leiter (1977). Suffice it to say here that high teacher satisfaction with the principal may quite reasonably stand for a larger satisfaction with school goals and means. In this setting, teachers may welcome the principal as a colleague whose observation and resultant suggestions would be helpful, not constraining.[22]

Effects of Directive Control Structures

While the impact of information gathering structures on teacher reports of their autonomy is minimal, directive control structures may have a substantial impact. Table 5 reports associations between the nine measures of teacher autonomy and indicators for three directive control structures, evaluation, rules and procedures, and the reward system. As in the case of information gathering structures, the

(Insert Table 5 here.)

largest and most frequent effects are on teacher reports of their autonomy in the coordination decision domain. Teachers feel less autonomous in this area at schools where the frequency of evaluation of tenured teachers is relatively high and where there are comparably many rules and procedures about coordination matters, but they feel slightly more autonomous where the rules are formalized and standardized. Teacher reports of autonomy with respect to scheduling conferences with parents are moderately associated with infrequent evaluation of tenured teachers and weakly with the awarding of discretionary salary increases. Compared to their effects on coordination autonomy, directive control structures have fewer effects on teacher reports of classrooms and personal behavior autonomy. Teachers feel somewhat more influential in classroom decisions at schools where nontenured teachers are evaluated frequently. They report slightly more autonomy in these matters at schools where administrators rate merit as unimportant in hiring new teachers and where dismissals are infrequent. Finally, teachers say they feel more autonomous with respect to their behavior in non-class hours at schools where tenured teachers are evaluted infrequently and where coordination rules are not emphasized. Lifestyle autonomy increases with the proportion dismissed.

Overall, not only are there few statistically significant effects of control on reported autonomy in Table 5, but several significant effects are not in the predicted, that is the constraining direction. These include the effect of formalization and standardization on coordination autonomy, the effect of discretionary salary increases on the parent conferences item, the effect of the evaluation of nontenured teachers or classroom autonomy, the effect of deemphasizing merit in

Table 5: Correlations between nine measures of autonomy*** and directive control variables.

	Evaluation		Rules/procedures				Rewards/Punishments			
	A	B	C	D	E	F	G	H	I	J
Classroom Autonomy										
Summary scale	-.17*	.10	.12	.10	.10	.13	.03	.16*	.09	.15*
Influence measure	-.17*	-.03	.03	.00	.07	.13	-.02	.06	-.02	.04
Coordination Autonomy										
Summary scale	-.09	.26**	-.01	.22**	-.14*	.08	.00	.06	.10	.02
Influence measure	-.11	-.06	-.03	.01	-.13*	.05	.02	.09	.04	-.04
Outside speakers item	-.01	-.09	-.01	.02	.01	-.11	.01	-.02	.04	-.01
Parent conferences item	.08	.25**	-.08	-.09	-.03	-.08	-.03	-.08	-.13*	-.05
Personal Behavior Autonomy										
Influence measure	-.02	.01	.05	.02	.08	.10	-.05	.12	.03	.00
Lifestyle item	.01	-.10	-.01	-.03	-.04	-.03	-.08	-.13*	.00	-.11
Non-class hours item	-.07	.17*	.04	.13*	.08	.01	.02	.03	-.01	.12
Descriptive Statistics (teacher level)										
mean	2.77	.49	1.18	1.59	0.00	3.66	.35	.03	.03	-.03
standard dev.	1.45	.34	.46	.53	1.32	.61	.26	.04	.10	1.39
number	227	211	246	246	243	246	200	236	241	214

* significant at the .05 level
** significant at the .01 level
***All autonomy measures are coded with autonomy at low end of scale.

Directive Control Variables Letter Codes

Evaluation

A: Frequency/nontenured teachers
B: Frequency/tenured teachers

Rules and Procedures

C: Number/classroom
D: Number/coordination
E: Formalization-standardization
F: Method for improvement

Rewards and Punishments

G: Proportion granted tenure
H: Proportion denied tenure, dismissed, or asked to resign
I: Proportion given discretionary salary increases
J: Importance of merit at hiring

hiring on classroom autonomy, and the effect of dismissals on lifestyle autonomy.

The absence of certain relationships among these significant findings is notable. First, one would have expected that rules and procedures about classroom and pedagogical matters would have an impact on teacher reports of their autonomy in the classroom. Many of the explanations for the weakness of personal observation as a control method do not apply to the regulation of classroom activities by this impersonal means. Administrators can have an impact on classroom order by rules. A Ring School rule that students who arrive late to any class must stand for the entire period is a good example. While administrators weak in academic training or teaching might be hesitant to issue directives to teachers about curriculum, many districts create curriculum guidelines and directives at the central office level where subject matter experts are employed or consulted. Rules and procedures, often formalized in bulletins and teachers' manuals, enter the physically isolated classroom very unobtrusively, in contrast to the administrator whose entrance is instantly noticed. Finally, teachers are likely to resist rules less than personal observation, because curricular rules are often created by experts, because rules do not carry the threat of administrative discretion or discrimination, and because rules do not flaunt status differences. Why do rules about classroom matters not have an impact on teacher reports of classroom autonomy? One contributing factor may be the generally lower level of rules and procedures in the classroom and pedagogical domain than in the coordination domain, as reflected in their means. A second possibility is that teachers feel more secure in deviating from directives in classroom matters than in school-wide matters, because their activities in the classroom are largely invisible, especially since information gathering techniques face such obstacles. Finally, teachers may not regularly interpret directives, such as those carried by rules, as constraints on their behavior. This explanation, which speaks to the generally weak associations between methods of control and reports of autonomy and is similar to the explanation for the unexpected effects

of observation on autonomy.

The other relationships which are notable for their weakness or absence are those between various aspects of the rewards system and teacher reports of autonomy. If schools operated as do many other organizations, one might have expected rewards to shape behavior powerfully. Of course, this might be the case, but the impact may be so subtle that teachers are not aware of the constraints carried by the reward system at their schools. Although these data provide no way to explore this explanation, the intensive study data suggest that teachers are conscious of the role discretionary salary increases and tenure denials and dismissals play in directing their behavior. A more likely explanation is that school administrators are in a much poorer position to exercise discretion in granting rewards than are managers in other organizations. Tenure is granted to an extremely large proportion of the teachers who become eligible; very few teachers are denied tenure, dismissed, or asked to resign (although the number of teachers who are subtly encouraged to leave is unknown); and discretionary salary increases are given to only a small number of teachers.

An important part of the reason for the absence of discretion in these areas is the powerful role teachers' organizations have played in regulating salary and in contesting any arbitrary disciplinary practices. Indeed, a Guttman scale created to measure the extent of union strength in a school correlated significantly with two of the three indicators of administrative discretion in the giving of rewards, .21 with the proportion granted tenure and -.20 with the proportion denied tenure, dismissed, or asked to resign.[23] The correlation with the proportion granted discretionary salary increases is statistically insignificant at -.09, but it is in the predicted direction.

Both the significant effects of rules on coordination autonomy and the mixed effects of evaluation on several of the autonomy measures bear further comment. Most interesting with respect to the impact of rules is that the number of rules constrains but the extent of their formalization and standardization enhances autonomy. While the former finding is consistent with the expectation that control over teachers places limits on the exercise of autonomy, the latter finding, while

weak, suggests a special property of a control system which is public (formalized) and consistently applied (standardized). Teachers may feel that such control can more easily be adjusted to and less easily used against them. Rules which are written down allow those who are asked to conform to come to firmer conclusions, even by conferring with colleagues, about what is expected of them. This is less true of verbally transmitted rules which may have been told differently to different people. Moreover, control through rules which are standardized does not allow administrators to discriminate among teachers in enforcement. At Village School teachers suffered the anxiety born of what they felt was control by rules which were neither clear in their expectations nor applied equally to all. Moreover, certainty about rules and procedures may help teachers themselves use those rules and procedures to have a greater impact on the school. In this respect, the relationship of this variable to coordination autonomy is noteworthy. This interpretation is similar to that of Moeller (1964) and Moeller and Charters (1966) in explaining their finding that teachers report a greater sense of power over school-wide matters where bureaucratic structures are more elaborated.

The other group of findings in Table 5 which should be further explored is the inconsistent impact of evaluation on teacher reports of autonomy. In general, frequent evaluation of nontenured teachers is moderately associated with reports of autonomy in classroom matters, but frequent evaluation of tenured teachers is associated with reports of constraint in the coordination and personal behavior domains. The two questions which arise are why are the directions of the impact of evaluation different and why are the domains in which the impact is felt different for the evaluation of nontenured and tenured teachers? Both questions require an explanation of the unexpected positive contribution to classroom autonomy reports of frequent evaluation of nontenured teachers.

One possible explanation is that administrative resources for evaluation are a fixed quantity at a school; therefore, the more frequently nontenured teachers are evaluated, the less frequently tenured teachers are evaluated. Since ninety-seven percent of the

teachers in the survey are tenured, the frequent evaluation of nontenured teachers at their schools would mean the infrequent evaluation of respondents at those schools and hence increased autonomy. This explanation cannot be relied on entirely because the correlation between the frequency of evaluation of tenured and nontenured teachers is +.21, suggesting that administrative resources for the evaluation of these two types of teachers are not regularly traded off against one another.

Another explanation is suggested by the purpose to which evaluation of nontenured teachers was put at Ring School. At this school the importance of such evaluation was stressed over evaluation of tenured teachers. It served, according to administrators, to clarify and emphasize administrative expectations for teacher classroom behavior for those teachers who would not know on the basis of experience what these expectations were. By quickly forming the classroom behavior of these new teachers to a standard set of expectations, the continuity of a school-wide style, tone, and practice could be assured. Tenured teachers, previously socialized to this set of administrative expectations, could see that the administration continued to support their own classroom behavior. More generally, the evaluation of nontenured teachers, always more frequent than that of tenured teachers, is a good indicator of administrative expectations for tenured teachers. The more frequently nontenured teachers are evaluated, the firmer that set of expectations becomes for the entire faculty.[24] The survey data support the plausibility of this explanation. The number of administrators at a school including principal, assistant principals, department heads, counselors, and unit heads, in positively correlated with the frequency of evaluations of nontenured faculty (.22) but negatively with the frequency of evaluation of tenured faculty (-.21). Similarly the flatness of the hierarchy is associated positively (.21) with the frequency of evaluation of nontenured faculty and negatively (-.21) with the frequency of evaluation of tenured faculty. These statistics indicate that increases in administrative resources, especially those lowest in the hierarchy and therefore in position for personal supervision, are applied primarily to the evaluation of nontenured teachers.

Implicit in this explanation is a meaning for individual autonomy different from the residual control over decisions left to the individual after other actors have taken part of the control for themselves. Instead, individual autonomy is seen as being furthered by subtle but substantial administrative or organizational control through the setting and reinforcing of expectations.

The constraining effect of the evaluation of tenured teachers on reports of coordination and personal behavior autonomy must still be explained. Since the association of such evaluation with the coordination summary scale is the strongest of these constraining effects and indeed is the largest correlation in Table 5, the explanation will concentrate on this relationship. The problem to explain is why the constraint is on coordination autonomy instead of on classroom autonomy. Evaluation of individual teachers usually speaks to their job performance, largely a classroom matter. The earlier discussion of evaluation at Ring School pointed out, however, that teacher adherence to administrative expectations about classroom behavior is the burden of the evaluation of nontenured teachers. Once a teacher has tenure, his or her basic agreement with and fulfillment of these expectations is assumed. In explaining the effects of the evaluation of tenured teachers, then, a different goal may be expected. This goal is suggested by the differential association of the frequency of evaluation of tenured teachers and the coordination summary scale where actors in the school's environment are satisfied and non-intrusive as opposed to where these actors are dissatisfied and intrusive. Dividing a scale for environmental satisfaction[25] and the number of community actors who have tried to influence school decisions in the last two years at their respective medians, the correlation is substantially greater where environmental pressure on the school is high compared to the correlation when this pressure is low. For the satisfaction scale, the two correlations are .46 and .17, respectively; for the number of actors attempting influence, .45 and .16. This suggests that evaluation of tenured teachers may have a different content where environmental pressure is high than where it is low. Specifically, where pressure is high, evaluation may be an attempt by administrators

to convey community wishes to teachers.[26] This explanation is consistent with the specific autonomy domain where constraint is most greatly experienced, the coordination domain. While community actors may be dissatisfied with specific teachers' classroom performance and convey these dissatisfactions to administrators, the more general community dissatisfaction measured by the environmental pressure scale (see endnote 24) is likely to be with school-wide or coordination matters, such as waste, student achievement, outside speakers, and the like. Administrators may respond by changing the content of evaluation to emphasize the community's agenda.

Discussion

The analysis of survey data in this paper has examined the relationships between various components of organizational control and individual reports of autonomy. Both information gathering and directive control were examined. The general expectation was that more elaborate control structures would be associated with decreased levels of individual reported autonomy. This expectation was not widely supported by the data analysis. First, neither type of control was regularly associated at statistically significant levels with reports of autonomy. Particularly notable were the lack of effects of control on classroom and pedagogical decisions and the minimal effects of personal classroom observation and discretionary rewards and punishments on individual autonomy reports. The absences of the expected zero-order relationships in these areas are connected. Classroom observation is potentially a strong constraint on classroom autonomy, but the data suggest that administrator interest in discipline rather than pedagogy, low levels of administrative academic expertise, and teacher resistance to observation substantially restrict the impact observation might have on teacher autonomy in the classroom.

Not only are the expected constraining effects of control structures largely absent in these data, but a substantial proportion of the significant relationships between control structures and autonomy reports suggest that control has some enhancing effects on autonomy as

well. This was most clear in the cases of the formalization and standardization of rules and procedures and of the evaluation of non-tenured teachers. Explanations for these unexpected findings rested on the role of organizational structures in facilitating teacher influence attempts and on the role of administrative expectations in facilitating individual professional practice.

These findings suggest two different paths along which to continue this inquiry into the relationship between organization control and individual autonomy. The data do not allow one to treat the relationship as a simple inverse one. Instead, on the other hand, one may search for the factors which reduce the constraining effect of control on autonomy. This was the approach taken here in exploring the relationship between observation and classroom autonomy. Other factors which might be examined include the power of teacher organizations, reductions in administrative resources, and demands by the environment which redirect resources which might be applied to control of teachers. Alternately, one may take the relationship between the autonomy teachers perceive themselves as exercising and the autonomy they actually exercise as problematic. Such a stance raises serious questions for any attempt to measure actual autonomy by self-reports. What would be a methodological problem, however, becomes a substantive focus if differences between behavior and perceptions in this area are taken as interesting.

The Weberian perspective on organizations, on which the basic proposition of this chapter was based, is fundamentally uninterested in the individual's perception or experience of an organization role. Organizational structures interrelate these roles; the control structure constrains individual behavior to the roles well enough to assure efficiency. While this perspective may explain organizational efficiency, it is too mechanical to explain individual experiences in organizations. Rational structuring does not in itself account for these experiences. In admitting that the experience of autonomy is a function of factors beyond the imposition of control, the argument must no longer rely only on the Weberian view of organizations.

In an alternate perspective, the construction of organizational goals and structures is quite problematic. Indeed, organizational members are among the shapers of goals and structures, their perceptions of autonomy are in part a function of their own goals, actions, and relationships with others in and out of the organization. With this perspective, one could explore the relationship between control imposed on teachers and the autonomy they perceive themselves as exercising, rather than assuming perceived autonomy to be the simple consequence of control. By explicitly taking the formation of those perceptions as problematic, new explanations may be generated. These new explanations may be able to accomodate the surprising findings of this paper at the same time that they paint a more accurate picture of the ways in which teachers actually experience control in their schools.

Endnotes

1. Porter, Lawler, and Hackman pose several questions about this general four step process of control. They suggest determinants of successful control. Three of these questions are quite relevant to the study of control and autonomy in schools: (1) How explicit are the standards? (2) What activities or behaviours are monitored? (3) What methods are used to shape performance to the standards? These will be addressed in the discussion that follows.

2. Crozier, studying French society, argued that face-to-face interactions between status unequals are always confrontations involving such great tension as to be avoided at all costs. In American society it would be more appropriate to treat the level of tension as a variable to be explained.

3. An interesting parallel study could examine sources of variation <u>within</u> schools in the effects of control on autonomy. The exercise of administrative discretion would be a key variable. In this study administrators will be compared for differences in the discretionary power they possess overall. In the parallel study the differential application of discretion in dealings with different teachers in the same school would be the issue.

4. The administrator questionnaire data show that principals value the maintenance of order in the classroom very highly. Twenty-five of thirty-three principals said that it was very important to them for teachers at their schools to maintain "an orderly, disciplined classroom," and all thirty-three principals said that this aspect of teacher performance was at least somewhat important to them. No other aspect of teacher performance listed in the questionnaire was "very important" to this many principals. Individualizing instruction was next most frequently given as very important with eighteen of thirty-three principals electing this response. These results suggest the inference that teacher observation is not widely relied upon for gathering information about teacher performance.

5. Of the sixty-one administrators in the survey, twenty-six percent have taught physical education, thirty-three percent a subject in the humanities, thirty-five percent a subject in the sciences, and forty-eight percent a subject in the social studies. Administrators are most likely, therefore, to believe they can learn through observation about the subject matter competence of social studies teachers.

6. Thompson (1967) suggests that unions often try to buffer workers from control. In particular, guilds, craft unions, and professional associations attempt to restrict monitoring to "the results, not the methods, of performance" (page 113). Teacher organization efforts to discourage classroom observation can be seen in this light as resistance to monitoring teaching methods.

7. To create this scale, a principal component analysis was performed on two items. The items, which loaded equally on the scale, are:

I have as much chance as I need to observe the teachers here.

The system we have here lets me get a pretty good picture of a teacher's work by observing him/her at work.

This scale accounts for seventy-eight percent of the common variance among the items.

8. It initially seemed possible to separate need for and availability of observation in the adequacy scale by treating the other two indicators of classroom observation as measures of need for observation. The resultant availability scale did not, however, relate in meaningful ways to other variables. This effort was, therefore, given up.

9. An emphasis on standardized testing also makes clear to teachers that administrators value a particular type of teacher performance, that which generates measurable achievement in students. Where testing is emphasized, some teachers may "teach for the test." Their pedagogical choices would, thus, have been shaped by the testing program, a form of directive control. Administrators would, ironically, be shaping teaching without perhaps knowing themselves how to get students to perform well on the tests.

10. In the order in which they constitute the scale, the component items are:

PBOs are used in <u>some</u>, but <u>not all</u> courses.

PBOs are used in writing curricula.

Examinations for students are written in terms of PBOs.

PBOs are used in all courses.

Student progress with respect to PBOs is used in evaluating teachers.

The scale, therefore, has six possible levels. The percentages of the schools at each level of the scale are: (1) thirty-four percent (2) twenty-eight percent (3) nineteen percent (4) thirteen percent (5) zero percent (6) six percent.

11. This scale was formed by principal component analysis. The constituent items and their loadings are:

Following rules and procedures is stressed for teachers at this school (.45).

The teachers' contract or the handbook or rulebook is often referred to in deciding what a teacher should do at this school (.56).

Most rules and procedures for teachers are not written down in the contract, handbook, or rulebook (-.53).

Teachers do not have more forms to fill out at this school than one would find at most schools (-.08).

This scale accounts for about thirty-five percent of the common variance among the constituent items.

12. These were combined into a single scale by principal component analysis. The scale explains about forty-two percent of the variance among the items. The loadings of the individual items on the scale are high grades (.46), graduate education (.34), high test scores (.41), specialization (.50), and teaching experience (.50).

13. State-wide teacher data reveal that the median age of teachers has remained essentially constant over the recent past (1969-70: 33.27, 1974-75: 33.23), but that the youngest quartile has aged 1.08 years to 27.28 and the oldest quartle has decreased by 1.47 years to 45.01. The aging of the teacher population is, thus, restricted to younger teachers (Michigan Education Association, 1975).

14. The proportion of nontenured teachers in the sampling area can be estimated from the MEAP data at about five percent. This estimate depends on the assumptions that the distribution of years of teaching experience (mean = 8.43, standard deviation = 3.03) is normal, although, in fact, it is slightly skewed with a median of 7.80 years, and that tenure is given universally after 2.37 years of experience, a figure chosen because it is two standard deviations from the mean, although the actual practice which varies from district to district is to decide on tenure after either two or three years. Five percent probably slightly underestimates the true proportion because the estimation procedure does not take account of teachers who have moved to a new district recently while having more than enough experience to have been granted tenure had they begun earlier in their current districts.

15. One female teacher claimed that before teachers were organized, females regularly were awarded smaller salaries than males on the assumption that men had to support greater numbers of people with their salaries.

16. Such discretionary salarly increases were given at only five schools.

17. In Tables 2 and 5 the descriptive statistics for the control structure variables are computed across teachers, because associations reported in these tables are at the individual level. This weights the school values on these structural variables by the response rate at each school and by the number of teachers sampled at each school. The response rate is the greater source of variation in number of respondents at each school.

18. The six schools where the administrator rated classroom order as both very important and the most important were coded 3. The seven schools where the administrator rated classroom order as neither very important nor the most important were coded 1. The eighteen schools where the administrator rated classroom order as either very important or the most important but not both were coded 2.

19. Administrative academic expertise is operationized by first taking the number of administrators at the school who have teaching experience in each of the humanities, the social studies, and the physical or biological sciences; then, dividing each number by the number of administrators at the school in order to standardize for variation in the size of the administration; and finally adding the three numbers together. This variable ranges from 0.00 to 2.50, with a mean of 1.13 and a standard deviation of .63.

20. Unlike many measures in this chapter, these three are at the teacher level.

21. This table ignores coordination and personal behavior issues, first, in order to restrict the number of comparisons to be made and, second, becuase one would expect observation to have its key effects on classroom and pedagogy decisions.

22. Table 4, examines the effect on autonomy of the interaction between observation and the contextual factors. The interaction effects could have been computed after the direct effects of observation and the contextual factors had been statistically taken into account. This probably would have reduced the size of the interaction effects. In Table the direct effects are not computed because the expected effects were the interactions. Large main effects were not expected in the context of expectations derived from the basic proposition that autonomy is determined by the level of control. Thus, computing the interaction effects after the main effects had been taken account of would have led to the underestimation of the interaction effects. Ironically, in explaining the unexpected differences in Table 4, a direct effect of satisfaction on perceptions of autonomy has been suggested. This represents, however, a large theoretical departure that is fully explored in Leiter (1977).

23. This scale has a coefficient of reproducibility of .94. The component items in the order in which they are combined to build the scale are:

A teacher who refuses to pay dues to the teachers' organization is discharged from the staff.

A grievance by an individual teacher is settled by compulsory arbitration of a neutral party if it is not settled by other steps.

Teachers are assured by contract of representation on the district's curriculum committee.

The scale values and the percentages of the schools at each value are:

(1) forty-two percent (2) twenty-four percent (3) twenty-one percent (4) twelve percent. The total is ninety-nine percent because of rounding error.

24. This explanation bears a striking resemblance to functionalist interpretations of the role of punishment of deviants in reinforcing norms for the collectivity.

25. Principal component analysis was used to combine aspects of community satisfaction with the schools into a single scale. The aspects and their loadings on the scale are:

Parents of students here would like to see significant changes made in this school (-.24).

Teachers and parents do not get along well here (-.27).

The parents here are well organized to present their wishes (.20).

The parents and I generally see eye-to-eye on issues concerning their children's education (.27).

In this community there is considerable mistrust of schools (-.30).

There is pressure in this community for a return to basics in the schools (.01).

People in this community are very receptive to new ideas in education (.20).

People in this community are afraid that their schools are inefficient (-.34).

People in this community provide generous support for their schools (.26).

People in this community generally believe teachers hold the same values they do (.33).

People in this community support the amount of innovative educational techniques we are using here (.28).

The parents of students here are quite satisfied with the school (.34).

The community is divided in its attitude towards the school (-.30).

Members of the school board generally agree on important matters (.23).

The scale composed from these items and loadings explains about forty-one percent of the common variance among the items. High values on this scale indicate a satisfied, supportive, unified, and organized community, receptive to innovation.

26. This is not to say that environmental pressure causes an increase in the frequency of evaluation nor that such pressure itself causes reports of constraint. The data do not bear these claims out.

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